

# **TRANSFER PATHWAY GUIDE**

## **2022-2023**

Associate of Applied Science in Computer Information Systems/Software  
Development at Sinclair College to a  
Bachelor of Science in Computer Information Technology  
at Northern Kentucky University

### ***Overview***

Completion of the following curriculum will satisfy the requirements for the Associate of Applied Science (AAS) in Computer Information Systems/Software Development degree at Sinclair College and leads to the Bachelor of Science (BS) in Computer Information Technology degree at Northern Kentucky University (NKU).

### ***Degree Requirements for Sinclair College***

To earn a degree at Sinclair College, a student must complete a minimum of 60 credit hours, attain a minimum cumulative GPA of 2.0, and earn a minimum of 20 credit hours at Sinclair College.

### ***Admission Requirements for NKU***

Students completing an associate degree with a cumulative GPA of 2.0 or higher will be accepted into NKU.

The Computer Information Technology, B.S. – Cloud and Systems Administration Track is offered both face-to-face and online.

### ***Tuition and Scholarships***

For information on tuition and scholarships, please visit <https://nku.edu/admissions/adult/online.html>

### ***NKU Contact***

For more information, students should contact Joel W. Vanhooose, Transfer Pathway Coordinator, at [vanhooosej2@nku.edu](mailto:vanhooosej2@nku.edu).

### ***Degree Requirements for NKU***

To earn a bachelor's degree at NKU, students must complete a minimum of 120 credit hours with at least 45 credit hours numbered 300 and above. In addition, at least 25% of the credit hours required for the degree and the last 30 credit hours must be completed at NKU. Students must have an overall GPA of 2.0 and meet all prerequisites for courses and requirements for the major, including earning a C- or better in all courses that count toward the major or minor. Students must complete a focus or minor as indicated on the pathway.

**Credits for Certifications:** Students with a current certification at the time of registering for classes will receive credit for equivalent NKU courses based on the following course mappings.

## Cisco

NKU students who have taken and passed an examination from Cisco, and hold a current certification (at the time of registering for classes) will receive credit for an equivalent NKU course. The chart below shows the semester credit hours and the equivalent NKU course.

EXAMINATION	EQUIVALENT NKU COURSE	TOTAL SEMESTER HOURS
CCNA Exam (200-301)*	CIT 247 Networking Fundamentals CIT 447 Network Design/Troubleshooting	6
CCNP Security Core Exam (350-701)*	CYS 484 Network Security	3
Certified Entry Networking	CIT 247 Networking Fundamentals	3

\*Credit given for exams taken after Summer 2020

## Computing Technology Industry Association (CompTIA)

NKU students who have taken and passed an examination from CompTIA, and hold a current certification (at the time of registering for classes) will receive credit for an equivalent NKU course. The chart below shows the semester credit hours and the equivalent NKU course.

EXAMINATION	EQUIVALENT NKU COURSE	TOTAL SEMESTER HOURS
Security+ (versions SY0-501 and later)	CYS 285 Cybersecurity Fundamentals	3
Network+	INF 284 Introduction to Computer Networks	3
Linux+	CIT 371 Unix Systems	3

Note: Students with Security+ exams SY0-401 and before will be required to take CYS 285.

**SINCLAIR COLLEGE AAS IN COMPUTER INFORMATION SYSTEMS/SOFTWARE DEVELOPMENT  
TO NKU BS IN COMPUTER INFORMATION TECHNOLOGY CHECKLIST**

**Sinclair College**

**Category 1: Sinclair Requirements for the AAS in Computer Information Systems/Software Development**

<b>Sinclair Course</b>	<b>Course or Category</b>	<b>Credits</b>	<b>NKU Course</b>	<b>Completed</b>
ACC 1100 or ACC 1210	Survey of Accounting or Introduction to Financial Accounting	3	ACC 100T ACC 200	
BIS 1120	Introduction to Software Applications	3	BIS 101	
CIS 1107	Introduction to Operating Systems	3	CIT 100T	
CIS 1111	Introduction to Problem Solving & Computer Programming	3	INF 110	
CIS 1130	Network Fundamentals	3	INF 284	
CIS 1140	Information Systems Analysis & Design	3	BIS 310	
CIS 1202	C++ Software Development I	3	INF 120	
CIS 1350	Web Site Development with HTML & CSS	3	INF 286	
CIS 2165	Database Management	3	INF 282	
CIS 2170	Computer Information Systems Internship	3	CEP 300	
CIS 2207 or CIS 2268	Data Structures & Algorithms or Structured Query Language (SQL) Programming	3	INF 120 CSC 200T	
CIS 2212	Java Software Development I	3	CSC 260	
CIS 2217	Java Software Development II	4	CSC 200T	
CIS 2222	ASP.NET with C#	3	CSC 200T	
COM 2225	Small Group Communication	3	CMST 230	
ECO 2160	Principles of Macroeconomics	3	ECO 200	
ENG 1101	English Composition I	3	ENG 101	
MAN 2150	Management & Organizational Behavior	3	MGT 205	
MAT 1120 or TBS XXX	Business Mathematics or Ohio Transfer 36: Mathematics (choose MAT 1450 for NKU major)	3	STA 100G, TBD XXX or (STA 205)	
SCC 1101	First Year Experience	1	UNV 101	
TBS XXX	Ohio Transfer 36: Arts & Humanities	3	TBD XXX	
	<b>Total Associate Degree Hours</b>	<b>62</b>		

TBS XXX means to be selected by Sinclair College student.

TBD XXX means to be determined by NKU based on course selected at Sinclair College.

## Northern Kentucky University

### Category 2: NKU Additional General Education Requirements

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
ENG 102	Advanced College Writing	3	ENG 1201	
TBS XXX	Oral Communication	3	COM 2211	
TBS XXX	Natural Science	4		
TBS XXX	Cultural Pluralism	3		
TBS XXX	Individual & Society	3		
TBS XXX	Culture & Creativity	3		
TBS XXX	Global Viewpoints	3		
<b>Subtotal General Education Courses</b>		<b>22</b>		

### Category 3: NKU Major Requirements for the BS in Computer Information Technology

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
INF 100	Orientation to College of Informatics	1	Waived for students with AAS degree	x
INF 120	Elementary Programming	3	CIS 1202	x
INF 282	Introduction to Databases	3	CIS 2165	x
INF 284	Introduction to Computer Networks	3	CIS 1130	x
INF 286	Introduction to Web Development	3	CIS 1350	x
CIT 130	Information Technology Fundamentals	3	CIS 1107 + CIS 2731	
CIT 171	Intro to Linux	1	CIS 2550	
CIT 271	Windows Administration	3	CIS 1510 + CIS 2510	
CYS 285	Cybersecurity Fundamentals	3	CIS 2670	
CIT 371	Unix Systems	3		
CIT 383	Scripting I	3		
STA 205 or STA 250	Statistical Methods or Probability and Statistics	3	MAT 1450	Can be taken at Sinclair
PHI 310	Information Ethics	3		
ENG 347	Technical Writing	3		
	Select one track from following tracks: Network and Administration Track Cloud and System Administration Track Cybersecurity Track (Required courses are listed in Categories 5-7 tables below.)	18		
<b>Total NKU Major Credit Hours</b>		<b>56</b>		

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
	<b>Less Major Credit Hours from Sinclair</b>	<b>13-22</b>		
	<b>Subtotal Major Credit Hours at NKU</b>	<b>34-43</b>		

#### Category 4: Additional Requirements at NKU

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
	<b>Subtotal Minor/Focus Credit Hours</b> Note: Any NKU focus or minor may be selected. Information Systems and Computer Science are common choices and require 9-15 additional credit hours beyond the courses taken for the major.	<b>9-24</b>		
	<b>Minimum Total Baccalaureate Degree Credit Hours</b>	<b>127</b>		

Note: Depending on track, focus/minor, and courses chosen, total credit hours for the baccalaureate degree may be higher and students may need additional electives to meet the 45-hour upper level graduation requirement. Work with your NKU advisor to make sure you meet all graduation requirements.

#### Category 5: NKU Major Requirements for the Network and System Administration Track

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
CIT 247	Networking Fundamentals	3	CIS 2416	
CIT 447	Network Design/Troubleshooting	3		
CIT 470	Advanced Network and System Administration	3		
CYS 484	Network Security	3		
CIT XXX	300/400-level CIT Course (not listed above)	3		
CIT XXX	300/400-level CIT Course (not listed above)	3		
	<b>Additional Credit Hours for Track</b>	<b>18</b>		

#### Category 6: NKU Major Requirements for the Cloud and System Administration Track

NKU Course	Course	Credits	Sinclair Course	Taken at Sinclair
CIT 436	Web Server Administration	3		
CIT 438	Cloud Computing	3		
CIT 451	Advanced Windows System Administration	3		
CIT 472	Database Administration	3		

<b>NKU Course</b>	<b>Course</b>	<b>Credits</b>	<b>Sinclair Course</b>	<b>Taken at Sinclair</b>
CIT XXX	One 200/300/400 level CIT course (not included above); one of CSC 260, ASE 220, or ASE 230 can count for this elective	3	CIS 2212 or CIS 2250	
CIT XXX	One 300/400 level CIT course (not included above); one of CSC 360, ASE 330, ASE 456, or CYS 484 can count for this elective	3	CIS 2217	
	<b>Additional Credit Hours for Track</b>	<b>18</b>		

**Category 7: NKU Major Requirements for the Cybersecurity Track**

<b>NKU Course</b>	<b>Course</b>	<b>Credits</b>	<b>Sinclair Course</b>	<b>Taken at Sinclair</b>
CYS 330	Introduction to Ethical Hacking	3		
CYS 385	Cybersecurity Analysis I	3		
CYS 484	Network Security	3		
CYS 485	Advanced Cybersecurity	3		
CIT/CYS XXX	Two 300/400-level CIT or CYS courses (not included above); BIS 382, CSC 482, and CSC 483 may count toward these electives	6		
TBS XXX	300/400-level CIT or CYS Course (not listed above)	3		
	<b>Additional Credit Hours for Track</b>	<b>15</b>		

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